

# Supplementary Materials

Medical mistrust, discrimination, and healthcare experiences in a rural Namibian community

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## Additional Methodological Details

**Table S1: Medical Mistrust Index Questions**

#	La Veist et al., 2009	Himba version
1	You'd better be cautious when dealing with health care organizations	You have to be careful when dealing with doctors and nurses
2	Patients have sometimes been deceived or misled by health care organizations	People are sometimes lied to by doctors and nurses
3	When health care organizations make mistakes they usually cover it up	When doctors and nurses make mistakes they try to hide it
4	Health care organizations have sometimes done harmful experiments on patients without their knowledge	Hospitals sometimes do tests on patients without their permission
5	Health care organizations don't always keep your information totally private	Doctors and nurses don't always keep your information totally private
6	Sometimes I wonder if health care organizations really know what they are doing	Sometimes I wonder whether doctors and nurses really know what they are doing
7	Mistakes are common in health care organizations	Doctors and nurses often make mistakes

## Healthcare experience questions

In addition to the medical mistrust index, all participants answered the following questions related to their experiences with healthcare and perceptions of discrimination:

- Have you ever been mistreated or harmed by a doctor/nurse? (Y/N)
- What happened? Briefly describe your experience (open ended response)
- Do you have any friends or family who have been mistreated or harmed by a doctor/nurse? (Y/N)
- Do you think that Himba are treated the same as patients from other tribes? (Y/N, with open ended response for explanation)
- Can you tell me a little about the last time you went to the hospital in Opuwo, either for yourself or a family member. What was your experience like? (open ended response)
- Was there ever a time when you (or your child) needed to go to the clinic or hospital but didn't (Y/N, with open ended response for explanation)

## Additional Statistical Results

### Demographic predictors of medical mistrust

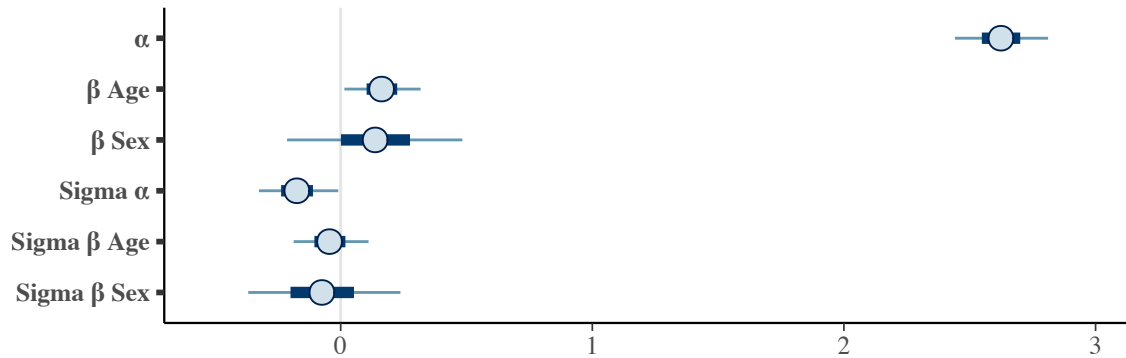
Medical mistrust index (MMI) was estimated in a Gaussian distributional model as shown below. Posterior distributions for this model are shown in Figure S1. In this model, male is the index category for sex, and age is standardized.

$$MMI \sim Normal(\mu, \sigma)$$

$$\mu = \alpha + age * \beta_{age} + sex * \beta_{sex}$$

$$\sigma = \alpha + age * \beta_{age} + sex * \beta_{sex}$$

Figure S1 - Posterior distributions of mode coefficients predicting medical mistrust



### Healthcare experiences and medical mistrust

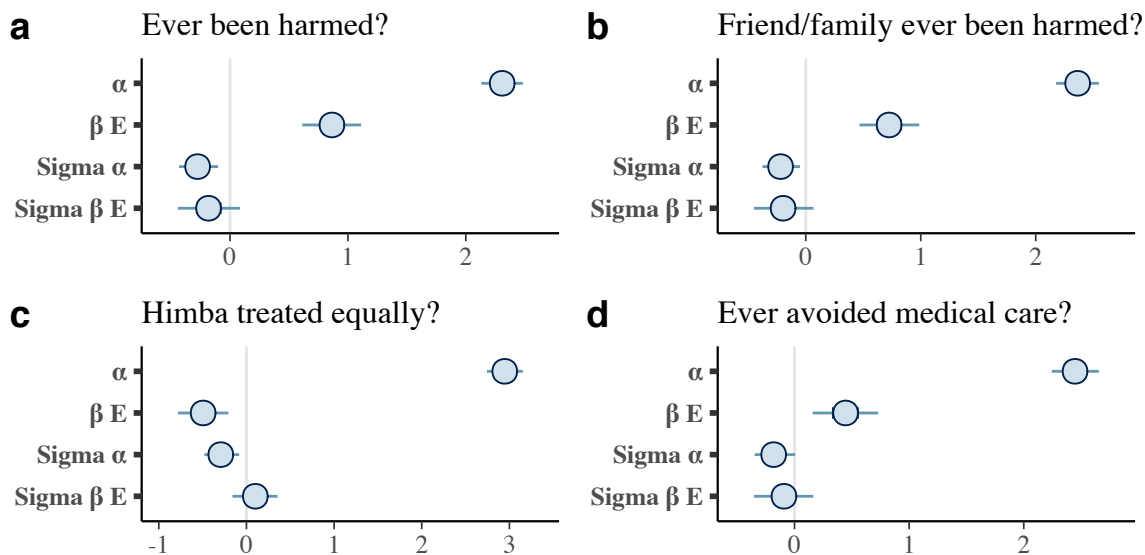
Healthcare experiences were used to predict medical mistrust using the model below.  $E$  represents the binary experience variable used in each question in the affirmative. Figure S2 shows posterior distributions for each model.

$$MMI \sim Normal(\mu, \sigma)$$

$$\mu = \alpha + E * \beta_E$$

$$\sigma = \alpha + E * \beta_E$$

Figure S2 - Posterior distributions of mode coefficients predicting medical mistrust by medical experience questions



### Additional statistical details

All analyses were run in R (R Core Team, 2020) using RStudio (RStudio Team, 2020). Multilevel models were fitted to *RStan* (Stan Development Team, 2019) using the *brms* package (Bürkner, 2017), and convergence

assessed by examining  $\hat{r}$  values. All models used 8000 iterations, half of which were warm-up, run on 3 chains. Other packages used include *tidyverse* (Wickham, 2017), *cowplot* (Wilke, 2017), *broom* (Robinson & Hayes, 2019), *modelr* (Wickham, 2020), *tidybayes* (Kay, 2020), and *janitor* (Firke, 2021).

## References

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